

Welcome to the Foothills



A GUIDE TO LIVING LIGHTLY
IN EASTERN FRESNO COUNTY

Introduction

Welcome to living in the foothills of Eastern Fresno County! This booklet is offered as a starting point for information to help you effectively take care of your property, provide for personal safety and live in harmony with the flora, fauna and your human neighbors.

If you have moved here from an urban area, you might not be aware of the many natural resource riches just outside your door, or how to help improve and sustain them. A few of those riches and needs are:

- Adequate supplies of clean water
- Wildlife to observe and enjoy
- Healthy ecosystems with native plants
- Clean air to breathe
- Fire safe communities, public lands and personal property



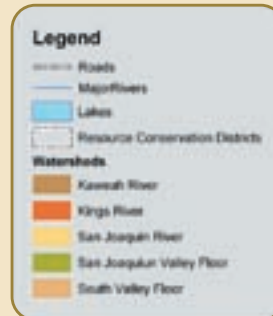
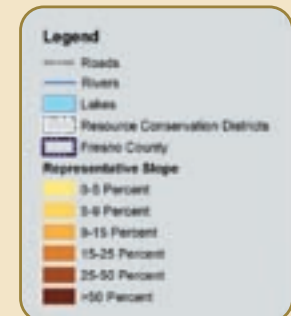
Each of these riches needs care and protection. This booklet is designed to help you do your part in the conservation of our natural resources so that you may continue to enjoy your surroundings in the years to come, and that we may pass them on to future generations.

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For additional information contact the Natural Resources Conservation Service at (559) 276-1791 ext.3 or www.ca.nrcs.usda.gov to request "Living in the Foothills".

Watershed in Eastern Fresno County



What is a Watershed?

A watershed is where a drop of water would flow from the top of a ridge down to the lowest point, where it joins together with water from other watersheds. Water flows from small streams to larger streams and rivers. It doesn't care about county or city lines, as it follows the path of least resistance to its final destination, the ocean.

Maintaining clean water within a watershed is of concern to everyone. Water is an important commodity to all living organisms. Although it appears as if we will never run out of water, 97 percent of the earth's water is salt water which is unusable. Only 3% is fresh, and of this 3%, two-thirds is locked up as ice and is unusable. **Only 1% of all water on the planet is available for us to use.**

Since only pure water evaporates, pollution is left behind. Even though this pollution does not enter our water cycle, it is still present in our streams, rivers and oceans. For this reason, we must be concerned with what we put into our water systems.



Where does your water come from?

As precipitation falls to the Earth, it remains on the surface, evaporates, or seeps into the ground. Surface water includes lakes, rivers and reservoirs. Water beneath the land surface that is not held in the soil is called ground water. Rain and snow are the principal sources of ground water in the mountains.

Beneath the surface layers of soil is a thick bed of hard rock. The bedrock is full of cracks, or fractures, created over millions of years. Water collects in some of these cracks and if the fractures are connected, passes through. A well may access one of these water-filled fractures, and thus provide water. These cracks may not refill with water as quickly as it is used. When this happens, wells go dry.

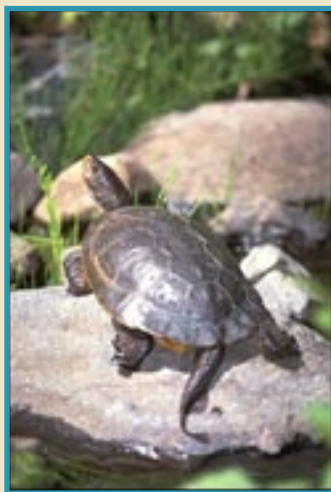
Water is a precious commodity, and it is important to use it wisely for the sake of everyone.

To read
*Watersmarts - A
Homeowner's
Guide to
Mountain Ground
Water*, go to
www.co.jefferson.co.us/jeffco/planning_uploads/water_ed/water_smarts_print.pdf

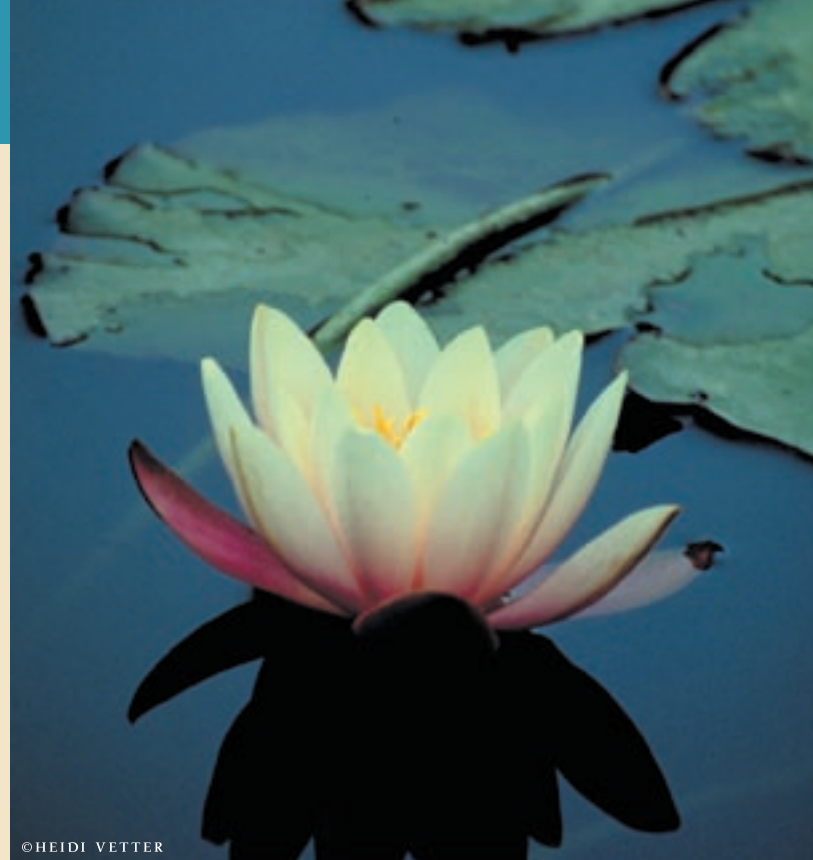
Water Quality

Clean water is essential to life as we know it. There are many things you can do as a property owner to help ensure safe, clean water for yourself and for others in the watershed. Proper septic system care, erosion control, and fire hazard reduction all have far reaching effects on water quality. Ensuring the proper disposal of hazardous and solid wastes, will help protect water quality whether you are on a well or a community water system. Everything you do on your property affects the whole, for better or worse.

How does pollution get from your backyard to the local reservoir, aquifer or river and beyond? Rain or snow falls and either soaks in to the ground or flows away to find a body of water, carrying with it traces of everything you've applied to your landscape - insect spray, weed killers, nitrogen fertilizer, etc.



At least half the households in the U.S. use pesticides, fertilizers or both in their yards. Pollution caused by storm runoff from sources such as backyards, parks and fields, parking lots and streets, is called nonpoint source pollution. Nonpoint



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source pollution is a leading cause of water-quality degradation and impairs drinking water supplies, recreational opportunities, fisheries, and wildlife habitat.

There are many alternatives to chemical fertilizers and pesticides. Some are as easy as homemade vinegar/pepper sprays. Compost and manure are two of the best fertilizers available. Ask your local nursery or pick up a publication on organic gardening.

For information on testing the quality of your water, contact Fresno County Resources Dept. at (559) 562-4259.

Water Conservation

What can we do to help maintain the health of our watersheds? Use less water! Small changes can add up. Here are some suggestions:

In the House

- 💧 Check pipes and faucets for leaks. One drop per second wastes 2,700 gallons of water per year!
- 💧 Test for toilet leaks by adding food coloring to the tank. If color appears in the bowl after 30 minutes, your toilet is leaking. One leaking toilet can waste 200 gallons of water a day!
- 💧 Install water-efficient toilets. Low-flush models can save 8,500 gallons per year for the average household.
- 💧 Turn off the water or install a flip on/off aerator for use when brushing your teeth or shaving.
- 💧 Install low-flow showerheads and save up to 40 gallons per shower.
- 💧 Run your dishwasher and washing machine only when you have a full load.
- 💧 Take short showers instead of baths. Baths can use 30 to 50 gallons of water. Showers use 5 gallons of water per minute, or less if a flow constrictor is installed.
- 💧 When washing dishes by hand, don't let the water run freely to rinse. Fill up the second side of your sink with rinse water.
- 💧 Fill a pitcher of water with drinking water in your refrigerator. Do not cool the tap water by running it every time you want a drink.
- 💧 Catch shower and sink warm up water in a pan or bucket, and use it to provide water for plants and pets.



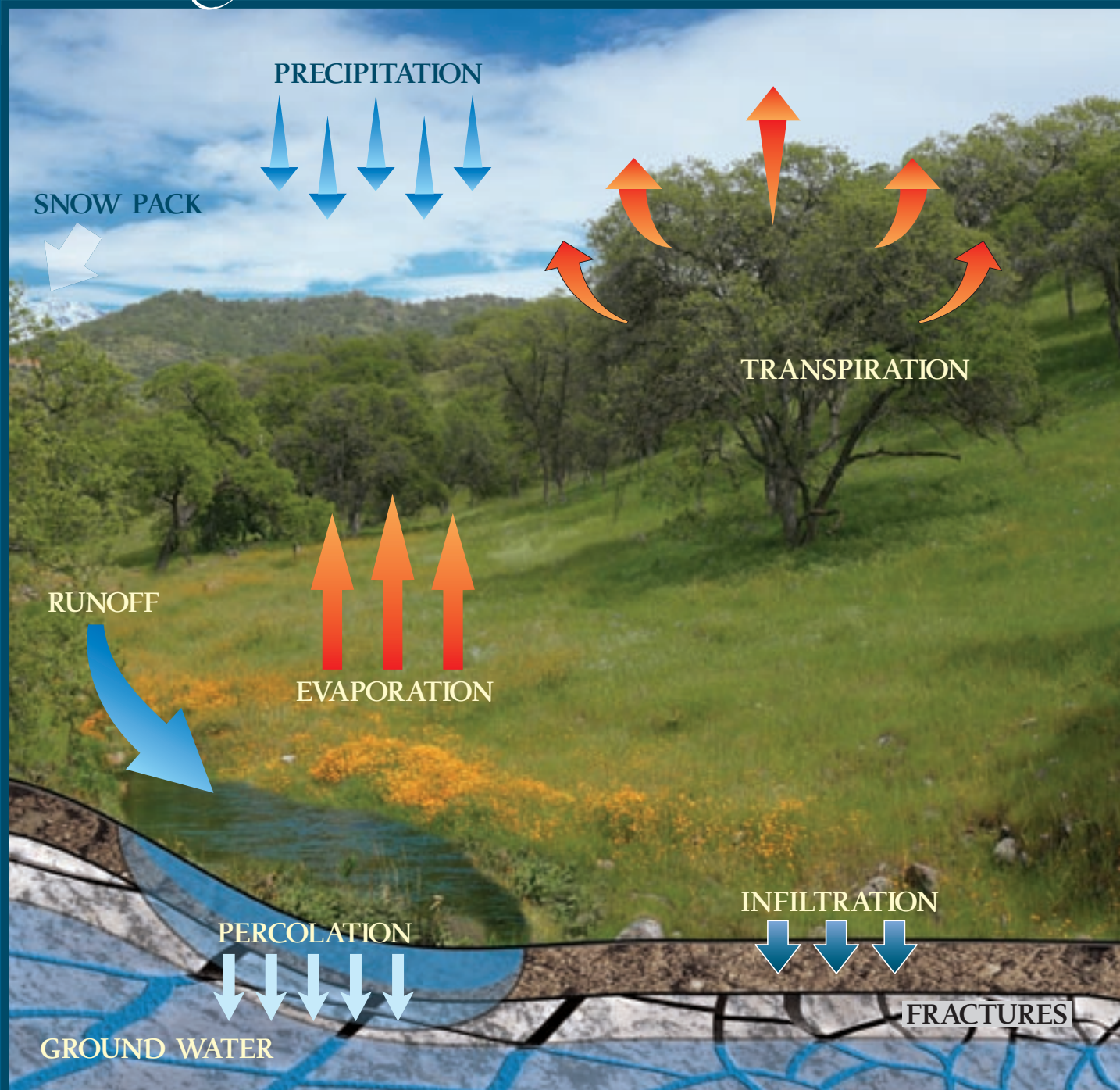
- 💧 When it's time to replace your washing machine, buy a water-saving model. These models use up to 1/3 less water and half the energy.
- 💧 Install a hot water recirculation system in your house. These systems keep the water hot in the water line so you don't waste water waiting for it to heat up. An average household can save a minimum of 15,000 gallons of water annually.

Outside

- 💧 Water lawns and gardens during the coolest part of the day.
- 💧 Use a drip irrigation system, instead of sprinklers, to apply water slowly exactly where it is needed.
- 💧 Collect rain from the gutter system on a house in a rain barrel to use for watering.
- 💧 Use a bucket of water and a spray head on the hose to wash your car. A running hose wastes over 100 gallons of water in the time it takes to wash the car.
- 💧 Choose plants that are native to the area where you live and/or plants that are drought resistant for landscaping.
- 💧 Reduce the use of chemicals, fertilizers, and pesticides that can get into the water table.

Visit the Water Saver Home at www.h2ouse.net or www.wateruseitwisely.com for more information.

Water Cycle



Rain and snow are the primary sources of water in the mountains. A large percentage of the rain and snow that falls is returned to the atmosphere by evaporation from soil, rock, plant and water surfaces. Some of the precipitation seeps into the ground and is called ground water.

Water from rain and melted snow that collects and flows down hill is called runoff, and is considered surface water. Most surface water moves downhill into streams and rivers, but some seeps into rock fractures and “recharges” the ground water. This water supplies many mountain wells. The water levels in fractures vary due to precipitation and season. When water in fractures empties out at the surface, it is called a spring.

Native & Drought Tolerant Plants

You can reduce your water consumption, help to protect your home against fire, and use fewer pesticides and fertilizers by planting low-maintenance native or drought tolerant trees, shrubs, and perennials in your garden. Native plants are better suited to local soils and can be more resistant to local pests.

Recommended Native Plants

COMMON NAME BOTANICAL NAME

Trees

Western Redbud	<i>Cercis occidentalis</i>
Interior Live Oak	<i>Quercus agrifolia</i>
Mountain Mahogany	<i>Cercocarpus betuloides</i>

Shrubs

Evergreen Currant	<i>Ribes viburnifolium</i>
Golden Currant	<i>Ribes aureum</i>
Fuschia-flowering Gooseberry	<i>Ribes speciosum</i>
Holly-leaf Cherry	<i>Prunus ilicifolia</i>
Wild Lilac	<i>Ceanothus spp.</i>
Coffeeberry	<i>Rhamnus californica</i>
Silk Tassel	<i>Garrya elliptica & fremontii</i>
Coyote Brush (well-maintained)	<i>Baccharis pilularis</i>
California Wild Rose	<i>Rosa californica</i>
Yucca	<i>Yucca whipplei</i>



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For more information:
California Native Plant Society at
(559) 243-0815 or
www.cnps.org

Perennials

Yarrow	<i>Achillea millefolium</i>
Coral Bells	<i>Heuchera micrantha</i>
Monkeyflower	<i>Mimulus spp.</i>
Beard Tongue	<i>Penstemon heterophyllus</i>
Royal Beard Tongue	<i>Penstemon spectabilis</i>
California White & Blue Sages	<i>Salvia apiana & clevelandii</i>
Purple & Black Sages	<i>Salvia leucophylla & mellifera</i>
Hummingbird Sage	<i>Salvia spathacea</i>
California Fuschia	<i>Zauschneria californica</i>
Blue & Yellow-Eyed Grasses	<i>Sisyrinchium bellum & californicum</i>
California Poppy	<i>Eschscholzia californica</i>
Matilija Poppy	<i>Romneya coulteri</i>
Western Columbine	<i>Aquilegia formosa</i>

Groundcovers

Creeping Oregon Grape	<i>Mahonia repens</i>
Prostrate Wild Lilac	<i>Ceanothus griseus horizontalis</i>
Stonecrop	<i>Sedum spathulifolium</i>
Sonoma Sage	<i>Salvia sonomensis</i>

Ask for them at your local nursery.



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Noxious Weeds - Landscaping



The booklet, "Field Guide to Invasive Non-Native Weeds of Mariposa, Madera, and Fresno Counties" is a great tool to learn more about noxious weeds. For more information, contact Joanna Clines at the US Forest Service, 559-877-2218 ext. 3150

Noxious weeds are non-native plants that have an extraordinary capacity to spread and become pests. One of the primary problem weeds in Eastern Fresno County is yellow starthistle, a spiny plant that is poisonous to horses. Yellow starthistle has a deep, thirsty root system that takes the water needed by native plants. It produces enormous numbers of seeds each year, helping it increase its range rapidly.

When a noxious weed such as yellow starthistle expands and displaces desirable plants, ecosystems become degraded and can no longer provide good wildlife habitat, livestock forage, or native wildflower displays. Noxious weeds often take over in areas where the vegetation and soils have been disturbed, so maintaining healthy soil and diverse native vegetation helps deter weed expansion. Areas such as roadsides and overgrazed pastures tend to be ideal sites for weeds to get a foothold. Weeds can be spread by vehicles, heavy equipment, contaminated hay and straw, or anything that moves contaminated soil to a new place. Some pest plants are actually still sold as ornamentals.

AN OUNCE OF PREVENTION...

Preventing the spread of noxious weeds is far cheaper than waiting until they have spread and require expensive control measures (and herbicides). Although noxious weeds will forever be newly introduced into our mountain area, recognizing and eradicating plants before they have a chance to proliferate will go a long way toward protecting our landscape.



What you can do:

- ☀ Plant only non-invasive species in your garden. Contact the California Native Plant Society at www.cnps.org for a list of safe plants.
- ☀ Remove weed seeds from your clothing, gear and pets' fur when you are in a contaminated area. Store the seeds in a plastic bag until you can dispose of them by burning.
- ☀ Drive only on established roads and trails. Rinse off all soil and plant particles from tires before moving from an infested area to a non-infested one.
- ☀ Ask for certified weed-free hay and straw from your supplier.
- ☀ Practice good land management. Keep your native and landscape plants healthy to resist noxious weed invasion.
- ☀ Manually pull weeds as soon as they appear.
- ☀ Report infestations to landowners or land management agencies.
- ☀ Join volunteer eradication efforts through your local Resource Conservation District or the Sierra San Joaquin Noxious Weed Alliance (www.cdfa.ca.gov).

Please note that there are many other noxious weeds in our area. They include: Spotted Knapweed, Bull Thistle, Italian Thistle, St. Johnswort, Scotch and Spanish Broom. For more information: visit the Weed Management Areas web site, www.cdfa.ca.gov/wma or contact Joanna Clines at the US Forest Service, 559-877-2218 ext. 3150

For more information, visit the Weed Management Areas website at: www.cdfa.ca.gov/wma

For information on the Sierra Resource Conservation District's Yellow Starthistle Eradication & Control Program visit www.sierrarcdd.com

Oak Woodlands Preservation

Care of California's Native Oaks

Native oaks, when young trees, are very tolerant of their environment and make excellent and adaptable landscape assets. The mature native oak is an invaluable part of our environment, but does not tolerate many changes once established.

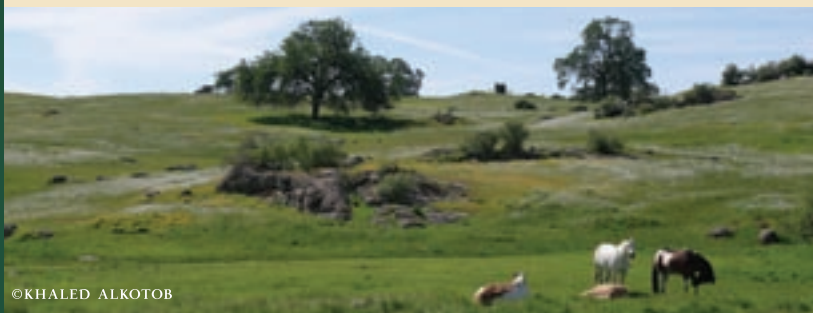
Most native oaks in California evolved in an environment with cool, moist winters and hot, dry summers. Homeowners should attempt to approximate the natural environment for these trees. They should be very careful in fitting buildings with these magnificent giants.

Any substantial change in the mature oak's environment can weaken or even kill a healthy specimen. A good rule of thumb is to leave the tree's root protection zone (RPZ) undisturbed. This area, which is half again as large as the area from the trunk to the dripline, is the most critical to the oak.

To protect a mature oak, pay particular attention to drainage, and avoid filling, trenching, or paving near its root zone. It is best to leave the natural grade within the root zone alone. Poor drainage is a common cause of oak tree deaths. Too much moisture, particularly in the warm, dry months, can smother the roots and encourage growth of fungi.

When an oak appears unhealthy, consult a certified arborist to determine the cause. Pruning should be performed by a certified arborist. Excessive pruning may cause a decline in vigor or kill a tree.

To manage oak woodlands appropriately and according to the California state law, consult a certified arborist or Registered Professional Forester (RPF) when management projects cover more than a few landscaping trees.



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When growing under natural conditions, native California oaks are relatively tolerant of most diseases. The two oak diseases most often encountered in irrigated settings are crown rot and oak root fungus. Symptoms are a decrease in vigor, twig die-back and wilting, abnormally yellow leaves and lesions on the bark with oozing, dark-colored fluid.

Treatment includes removing lawn and plants that require irrigation from the RPZ. Remove soil and other debris near the trunk. Do not water in the RPZ during the summer. Improve drainage around the tree and prevent mechanical damage.

Mistletoe is a parasitic plant that grows on the branches of many oaks and can cause structural weaknesses that make branches more vulnerable to breakage. Small infestations can be removed and the bark around the spot where the mistletoe stem entered the branch cut back. Major infestations are difficult to control. An arborist should be consulted.

Because oak woodlands also contain significant rangeland, for rangeland consulting, either a RPF or a Certified Range Manager are the appropriate professionals (also per California state law).

For more information on finding an RPF: www.clfa.org/how_to_find_a_rpf.htm

Insects

Many insects live in the branches and leaves of oaks, usually without much consequence to the healthy tree. Oak gall, for example, is a harmless swelling of leaves and twigs in reaction to enzymes released where a wasp lays its eggs.



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Some infestations, however, can cause serious damage. Pit scales, oak moths and other leaf-eaters can weaken oaks, making them susceptible to disease. Whenever an infestation causes substantial leaf loss, changes in leaf color, twig die-back, sticky or sooty foliage and branches, or other significant changes in appearance, a certified arborist should be consulted.



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Forest Land Management

If you are fortunate enough to have forest woodlands on your property, there are some things you should know about water, diseases, thinning, and fire danger.

One place to start is to contact the California Department of Forestry and Fire Protection (CDF), or hire a private forester for a consultation. CDF's goal is to maintain the sustainability of California's natural resources. The Department funds and administers State and Federal Forestry Assistance programs for land owners that are supervised by RPFs, demonstrates sound management practices on eight state demonstration forests, enforces the California Forest Practice Act on all non-federal timberlands, provides research and educational outreach to the public on forest pests such as Sudden Oak Death and bark beetle, and coordinates efforts for fire hazard reduction to reduce the risk of wildfire and improve the quality of California ecosystems.

The removal of almost any conifer requires a state-issued permit. Such permits must be prepared by a Registered Professional Forester.

Contact a CDF forester at: (559) 243-4114, or visit their website at www.fire.ca.gov

Another resource is the Fresno County Agriculture Department (559) 456-7510.

Why is it important to maintain your septic system?

- Failing septic systems may result in the release of raw sewage into the environment, which can affect water quality in surrounding water bodies and impact drinking water supplies in nearby wells.
- Improper maintenance may result in expensive repairs.
- Surfacing sewage may expose your family and pets to disease causing bacteria and viruses.

Some guidelines:

- Never dispose of paints, varnishes, thinners, waste oils, pesticides, or other hazardous chemicals in your septic system.
- Avoid disposal of coffee grinds, diapers, kitty litter, sanitary napkins, grease, paper towels and other household items in your septic system.
- Fix leaky faucets and running toilets, and use washing machines and dishwashers only when full. This will prevent saturation of the soil in the drain field, which can affect the quality of the soil and its ability to naturally remove toxins, bacteria, viruses, and other pollutants from the wastewater.
- Annually inspect your septic system to ensure that it is 1) working properly and 2) to determine when the tank should be pumped. If your septic system utilizes a dual disposal field, it is recommended that you switch leach lines when the clocks change.
- The frequency of pumping your tank depends on the tank size, the number of people living in your home, and the habits of your particular household. The general recommendation is from 3 to 5 years.

- Maintain and repair your septic system if it is defective, leaking or experiencing problems. Contact Fresno County Resources Department prior to beginning repair or replacement work.

To ensure our waters are clean for drinking and recreation, keep your septic system properly maintained.

Fresno County
Resources Dept.
(559) 262-4259



Soil Care and Conservation



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Healthy soil goes hand in hand with a healthy environment. Land owners need to be aware that poor soil quality is linked to: invasions of non-native weeds; erosion; sediment in our streams, rivers and lakes; reduced land productivity (ability to grow plants); and an ineffective water cycle, leading to reduced water in springs and wells. Increases in noxious weeds, erosion, and low spring and well levels are all indicators of poor soil health. The first and most important step in improving soil health is to recognize that soil is a living organism, which all other parts of our ecosystems depend on.

Soil health is directly connected with water quality and availability. This is especially important in the Sierra Nevada Mountains, where 80% of the water Californians consume originates from. Soil washing downstream is known as sediment. It is the leading pollutant in our nation's surface waters. It fills reservoirs, reduces water availability and fish spawning habitat, and depletes important nutrients from topsoil. Sediment in streams, rivers and lakes may be caused by ground disturbance during grading on construction sites, use of mechanical and/or heavy equipment on slopes, lack of or improperly sized culverts, inadequate gutters and drainages, improperly installed driveways and access roads, or any other activity that disturbs the soil and is not properly treated or mitigated prior to the rainy season.

Organic matter (decomposing vegetation) in soil is an important indicator of soil health. Low levels of organic matter in our soils are as great a cause of runoff and erosion as paved surfaces, homes, and development. Vegetation not only provides cover and habitat for birds, mammals and beneficial insects, but also prevents soil erosion. Vegetation holds the soil in place, adds organic matter, provides important nutrients, and reduces weed competition. In addition, increasing the organic material in your soil increases the amount of water infiltration and retention which facilitates ground water recharge.

Some basic practices are to avoid compaction and tillage, conserve topsoil by preventing erosion, increase organic matter with compost, cover crops, and mulching. Be sure there is adequate water, nutrients and air for plants to grow well.

What you can do:

- ✦ Protect cut-and-fill slopes with stabilizing material such as vegetation, fiber cloth, straw, wood chips, riprap (large rocks), gabions (wire baskets filled with rocks), or retaining walls.
- ✦ Install culverts according to local, regional, and California State Code standards.
- ✦ Maintain vegetative ground cover in riparian areas.
- ✦ Divert water away from driveways and pathways to prevent gully erosion. Water bars may be used where appropriate.
- ✦ Minimize soil surface disturbance. Maintain vegetative cover using native plants whenever possible.
- ✦ Do not remove naturally fallen pine needles and leaves from the ground surface, if possible.
- ✦ Clean and/or remove undesirable or human-caused debris from riparian areas.
- ✦ Avoid mechanical or machinery use on slopes greater than 30% whenever possible.

Most importantly, re-vegetate all bare or disturbed soil with grass seed or native plants, wood chips and straw mulch (be sure straw is certified weed free to prevent the introduction of noxious weeds). The optimum time to do this is between October 15 and November 15.

For more information on organic matter in soil, why we're losing it, how to add organic matter to the soil, and why we need to understand sensitive soil ecosystems; visit these sources:

Soil Biology Primer, a complete view of the ecological processes regarding soil.

http://soils.usda.gov/sqi/concepts/soil_biology/index.html

Information on "Brittle" vs. "Non-brittle" environments; and management for social, financial, and ecological benefit.

<http://www.managingwholes.com>

For more information:
Contact the
Natural
Resources
Conservation
Service at (559)
276-7494 ext. 3.

Before grading,
please contact
Fresno County
Public Works
Dept. at
(559) 262-4055.

Fire Hazard Reduction

For Fire Hazard Reduction information, visit www.firesafecouncil.org

Eastern Fresno County has been identified as a "High Fire Threat Area" by the California Department of Forestry & Fire Protection. The United States Forest Service has listed many of our communities in the Federal Register as "Communities at Risk," based on the threat of fire from Federal lands. The 1961 Harlow Fire took place in our area. That fire still holds the record for the fastest moving fire in California fire fighting history.

The threat of a large damaging wildfire is high, as is the potential for loss of valuable natural resources, personal property and human life.

Without clearing and thinning to reduce the fuel load, the risk of wildfire on your property continues to increase. To protect your property, public law requires that you create a fire safe buffer at least 100 to 200 feet around your home. The steeper and more vegetated the property, the larger the buffer must be.

To do this effectively, use the "Lean, Clean, and Green approach."

Lean: Thin out thick vegetation to create a more park-like look.

Clean: Keep lawns mowed and trim shrubs.

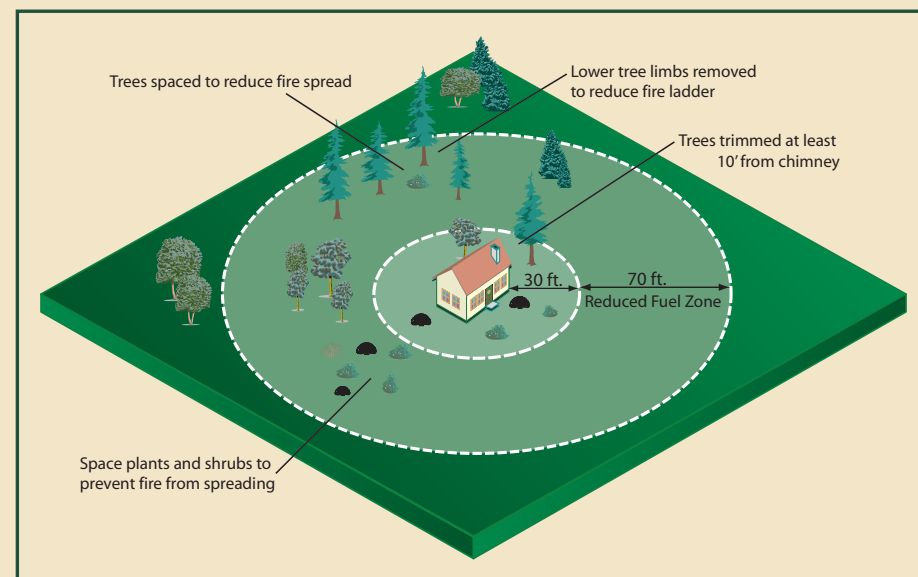
Remove dry, resinous, or dead plants and flammable debris.

Remove lower tree limbs, and limbs within 15 feet of chimneys, power lines and outbuildings. Use non-combustible surfaces for walkways, patios and driveways.

Green: Use low growing, non-woody plants for landscaping.

Provide irrigation to keep the plants within your defensible space green.

DEFENSIBLE SPACE			
Recommended spacing of trees and bushes based on steepness of slope			
SLOPE	0-20%	20-40%	+40%
Shrubs*	2x	4x	12x
Trees	10'	20'	40'
* times the height of the bush. For example, a 2' high bush on a 20% slope will need 4' spacing.			



REMEMBER:

Clearing need not be bare mineral soil for entire 100 feet. To learn how to properly create 100' of defensible space, read the CDF's "Why 100' brochure" found at: www.fire.ca.gov/php/above_content/downloads/CDFWHY100FEETBROCH2006.pdf

Fire Hazard Reduction (cont.)

ADDITIONAL PREPARATION FOR FIRE SEASON

- 🔥 Clean all vegetation from roof, eaves and rain gutters.
- 🔥 Keep your flues clean year-round.
- 🔥 Cover chimney outlets and flues with a spark arresting half inch stainless steel mesh screen.
- 🔥 Clean all flammable materials from beneath decks.
- 🔥 Keep emergency phone numbers and evacuation routes clearly posted.
- 🔥 Prepare a "Grab and Go" bag for each family member and pet.
- 🔥 Keep weeds cut back.
- 🔥 Move firewood at least 30 feet from all structures.
- 🔥 Plan your escape route in advance and make sure everyone knows it.
- 🔥 Make sure your address is clearly visible from the street in all weather.
- 🔥 Keep vehicles full of gas.
- 🔥 Keep a two-week supply of water, candles, non-perishable food and medications.
- 🔥 Keep cash, bank and insurance information handy.



Sierra National Forest, Engine 52



Sierra National Forest, Engine 52

WHAT TO DO IF A FIRE IS HEADED YOUR WAY....

If time permits, take a few precautions to provide additional fire defense for your home:

- 🔥 Remove flammable items such as grass doormats and bamboo shades.
- 🔥 Minimize flat surfaces that could let a burning ember smolder. Tip wood picnic tables and benches on their sides.
- 🔥 Remove patio umbrellas, collapsible awnings and outdoor cushions.
- 🔥 Close all windows, doors, and garage doors.
- 🔥 Wet down buildings and defensible zone, including mulch piles and hay storage areas.
- 🔥 Move furniture to the center of rooms, or walls away from the oncoming fire.
- 🔥 Use telephones only for emergencies.
- 🔥 Evacuate if you are directed to do so. Fire moves faster than you or your vehicle can.
- 🔥 To report a fire call 911.
- 🔥 For professional fuels management advice, consult a Registered Professional Forester (per California law).

For Information about obtaining a Burning Permit contact the San Joaquin Valley Air Pollution Control District (559) 230-6000.

California Air Resources Board, "Fifty Things You can do" at: www.arb.ca.gov/html/brochure/50things.htm

Although we live in a relatively pristine environment, air quality is an increasingly important issue in the Sierra foothills. As air quality worsens in the San Joaquin Valley, the foothill area experiences the repercussions. Poor air quality not only threatens the health of people in our area, but can also damage our ecosystems.

Nearly 60 percent of the air pollution in our area comes from cars and trucks. Other sources include off-road vehicles, water craft, lawn and garden equipment, woodstoves and fireplaces (especially inefficient ones), outdoor burning, electrical generation (from non-renewable fossil fuels), industrial sources, consumer products and wildfires.

Indoor air quality also affects our overall health and well-being. Smoking; some cleaning products; mold; and off-gassing of paint, furniture and carpeting, all contribute to reduced indoor air quality.

Things you can do:

- ☀ Drive less! Carpool or use public transportation whenever possible, walk, ride a bike, telecommute, etc. Limit your trips to town by combining all you errands into one trip.
- ☀ Drive an efficient, low polluting vehicle and keep it well maintained.
- ☀ Don't use a woodstove, pellet stove or fireplace on days when the air quality is poor.
- ☀ If you use a woodstove, pellet stove or fireplace insert, make sure it's EPA approved, and that the catalytic converter is functioning properly.
- ☀ Chip yard trimmings and brush piles, don't burn them.



- ☀ Chose air friendly products with low, or no VOC's (Volatile Organic Compounds).
- ☀ Paint with a brush instead of a sprayer.
- ☀ Drive slowly on unpaved roads.



For more information:
Contact the San Joaquin Valley Air Pollution Control District at (559) 230-6000 or www.valleyair.org

Energy Conservation

Choosing green energy is an important way to protect your health while reducing your contribution to global warming. Green energy is electricity from renewable sources - sun, wind, water, biomass and geothermal. These renewable sources emit little pollution and, unlike nuclear production, leave no radioactive waste.

Some things you can do:

- ⚡ Consider having a comprehensive audit done on your home. Make a plan of action.
- ⚡ Check insulation in the attic, basement, and walls. Note the age and condition of heating and cooling equipment, appliances, windows, and water heaters.
- ⚡ Wrap water heaters with insulating jackets.
- ⚡ Turn down water heater thermostats to 120°F.
- ⚡ Turn off lights when leaving a room.
- ⚡ Set thermostats to 68°F in winter when you're home, and down to 55°F when you go to bed or when you're away.
- ⚡ Use energy-saving settings on washing machines, clothes dryers, dishwashers, and refrigerators.
- ⚡ Don't waste water, hot or cold, inside or outside your home.
- ⚡ Clean your refrigerator's condenser coils once a year.
- ⚡ Air-dry your clothes.
- ⚡ Close heating vents in unused rooms.
- ⚡ Repair leaky faucets and toilets (5 percent of water "use" is leakage).



- ⚡ Close drapes (and windows) during sunny summer days, and after sunset in the winter.
- ⚡ Install water-saving 2.5-gallon-per-minute showerheads.
- ⚡ Install water-efficient faucet heads in your kitchen and bathroom sinks.
- ⚡ Install programmable thermostats.
- ⚡ In the attic and basement, plug the air leaks and replace and reputty broken window panes.
- ⚡ Clean or change the air filter on your warm-air heating system during winter, and on air conditioning units in the summer.
- ⚡ Insulate the first three feet of hot and cold inlet water pipes.
- ⚡ Buy energy efficient appliances. Energy Star products power down when not in use.
- ⚡ Recycle and choose recycled products whenever possible.

Energy Conservation (cont.)

- ⚡ Use energy efficient lighting such as indoor compact fluorescents, and motion sensors and solar lights outdoors.
- ⚡ Seal and insulate warm-air heating (or cooling) ducts.
- ⚡ Have heating and cooling systems tuned up every year or two.
- ⚡ Make insulating shades for windows, and add insulating storm windows. In hot climates, shade sunny windows or add solar gain control films.
- ⚡ Insulate hot water pipes in unheated basements or crawlspaces.
- ⚡ Consider installing other energy sources such as solar panels, wind or water power.
- ⚡ Rideshare or use public transportation whenever possible.
- ⚡ Consider a hybrid or alternative fuel vehicle when it's time to buy a new car.

Contact your State Energy Office and utility companies for program information.

The view of the Sierra-Nevada mountains from the Valley after the rains have taken the pollution out of the air.



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Conserving energy reduces pollution, preserves our natural resources and helps keep our scenic foothills and mountains beautiful.

Trash, Recycling & Composting

Reducing the amount of trash you produce can make a big impact on your environment. **Reduce, Re-use, Recycle.**

Think Conservation and become a Practicing Conservationist.

It has been said that the USA is one of the most wasteful countries on Earth. Whether this is true or not, to conserve our resources and re-use as much as possible is a process that pays dividends and is worth the effort.

Disposing of Recyclable Solid Waste:

In the mountain foothill communities solid waste pickup is called Mixed Recyclables and are picked up in separate containers. The General Refuse is for all other waste (not construction materials) and is picked up in separate designated containers.

Fresno County Public Works & Planning

For details of recyclables, hazardous materials and waste management refer.

559-262-4259,

www.co.fresno.ca.us/4510/4360/resource.htm

Fresno County Recyclable Directory

This covers all recyclables, including waste oil and many other hazardous materials as well as disposal locations.

www.co.fresno.ca.us/4510/4360/misc/2007FresnoCountyRecyclingDirectory.pdf

For information on Solid Waste Service Areas:

www.co.fresno.ca.us/4510/4360/misc/SRA_Exhibit_C_Spring05Haulers_Agreement.pdf

For information on Disposing of Construction and Demolition Debris:

This includes recycling vendors and disposal sites.

www.co.fresno.ca.us/4510/4360/misc/Const_and_Demo.pdf

For self hauler disposal and recycling services refer:

www.co.fresno.ca.us/4510/4360/misc/selfhaulad.pdf

For Large Quantities of Waste Oil Deposal & Hazardous Waste:

One such vendor is Evergreen Environmental Services:

800-596-9455 or 510-719-7288, www.evergreenoil.com

Disposing of Brush

Because of air quality concerns, chipping of woody materials is preferred to burning. Chips can be used as mulch around plants which helps retain water, puts nutrients back into the soil and reduces erosion.

If you plan a hazard burn, be sure it is a safe burn day:

Check the San Joaquin Valley Air Pollution Control District for allowable days:

www.valleyair.org/aqinfo/burn_status_all.htm

Living With Wildlife

Wildlife contributes to our enjoyment of nature and living in our rural area. Wildlife may also damage resources and property, and threaten human health and safety if natural balances are disrupted, or animals become too accustomed to people. Here are some tips to help you enjoy living in harmony with the wildlife in our area.

- ❧ **Never feed wildlife!** It reduces their ability to fend for themselves, causes them to lose their natural fear of humans, and leads to human/wildlife conflicts. **Feeding big game mammals such as deer and bears, is illegal** (Barclays California Code of Regulations, Title 14, 251.3); and attracting deer, squirrels, birds and other wildlife also attracts predators including bears, bobcats coyotes and mountain lions.
- ❧ Eliminate water sources close to your home.
- ❧ Landscape with plants that deer don't like to eat.
- ❧ Secure garbage containers and eliminate odors. Do not put meat, fish or other pungent scraps in compost piles, and keep barbecues clean and grease free.
- ❧ Feed pets and livestock indoors wherever possible. Store Feed where it is inaccessible to wildlife.
- ❧ Don't allow pets to run free, and provide secure nighttime housing for them. They may not only chase and injure or kill wildlife, but may also become tempting food for wild predators.
- ❧ Confine livestock in secure areas; such as barns and sheds, at night.
- ❧ Place electric or animal resistant fencing around fruit and vegetable gardens. Fencing, sensor lights and dogs may also deter wildlife from coming too close to your home.

- ❧ Trim trees, shrubs and tall grass from around your house and yard. Remove logs, woodpiles and rock walls; that provide hiding places for wildlife.
- ❧ Close off access to spaces under decks, and in garages, attics and sheds. Seal off or screen foundation openings, vents, doors windows and eaves.
- ❧ **Don't leave small children unattended outside!** Keep them close and in your sight. Bring them inside from dusk to dawn.
- ❧ Don't hike alone.

What to do if you encounter a mountain lion, bear, or coyote:

- ❧ Don't approach them. Give them a way to escape.
- ❧ Don't run. Stand and face them, make eye contact and pick up small children so that they don't run.
- ❧ Don't bend over or turn away, even when picking up children. Bending over, turning away or crouching makes you look like prey.
- ❧ **LOOK BIG!** Raise your arms, open your jacket, and throw stones or whatever you can reach without crouching.
- ❧ Wave your arms slowly and speak firmly in a loud voice. Bang pots or pans to make noise.
- ❧ Fight back if you are attacked.



For more information contact the California Department of Fish & Game (559) 243-4005 x132 or visit www.dfg.ca.gov

Info available from CDF&G includes:

“General Gardeners Guide to Preventing Deer Damage”

“Living with California Black Bears”

“Living with California Mountain Lions”

“Living with Coyotes”

Community Information & Organizations



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To learn more about, and become more involved in your community contact:

Fresno Convention and Visitors Bureau
847 M St., Third Floor, Fresno 93721
(800) 788-0836 or 559-621-4700
www.fresnocvb.org

Reedley Chamber of Commerce
1158 G Street, Suite 100, Reedley, CA 93654
(559) 638-3548 www.reedleycalendar.com

**US Forest Service, Sierra National Forest
High Sierra Ranger District**
29688 Auberry Rd., Prather, 93651
(559) 855-5355, www.fs.fed.us/r5/sierra

**US Forest Service, Sequoia National Forest
Hume Lake Ranger District**
35860 East Kings Canyon Road, Dunlap, CA 93621
(559) 338-2251 www.fs.fed.us/r5/sequoia

Shaver Lake Chamber of Commerce
(559) 841-3350, www.shaverlakechamber.com

Fresno County Office of Tourism & Film Commission
Noting Fresno County Attractions and Events
559-262-4271 www.gofresnocounty.com

Eastern Fresno County Historical Society
P.O. Box 625, Auberry, CA 93602
559-855-8874, www.efchs.org

Public Utility meetings – PG&E: www.pge.com, Energy
Line: 1-800-933-9555.

Southern California Edison: Community & Environment:
1-800-655-4555, www.sce.com

Sierra Resource Conservation District – Promotes, protects,
and improves the natural resources of Eastern Fresno County
www.sierrarcid.com

California Forest Stewardship Program – Provides technical
and financial assistance to landowners who want to protect
and enhance their forest lands and associated wetlands.
1-800-738-8733, www.ceres.ca.gov/foreststewardship

University of California Cooperative Extension – As a
land-grant institution, the Cooperative Extension mandate is
tied to the welfare, development, and protection of California
agriculture, natural resources, and people.
559-456-7285, www.cemadera.ucdavis.edu

**For information on lakes, campgrounds, lodging, outdoor
recreation and other activities:**

www.parks.ca.gov/?page_id=587 (Millerton Lake)
www.CAescapes.com
www.museumusa.org
www.gofresnocounty.com
www.homesteadcottages.com
www.nps.org/seki/
www.sce.com/CommunityandRecreation/Camping
www.sequoia-kingscanyon.com
www.sierrasummit.com
www.museumsusa.org
www.wishonvillage.com
www.cedarcrestresort.com
www.muirtrailranch.com
www.reedly.com/community-interest-museum.html
www.kingsriver.com
www.fs.fed.us/r5/sierra/recreation/wintersports/index.shtml

Resource List

A handy place for local information is in your phone book. Those responsible for issues concerning private property are State and County agencies. Look under "Government" sections for local, state and federal offices, official's names, addresses and phone numbers, area maps and zip codes. For emergencies, fire, ambulance and law enforcement call 911.

Look under "California" in the white pages when looking for the California Department of Fire Prevention or the California Department of Fish and Game, and under "Fresno County" when looking for county resources such as the Sheriff's Department, roads, health services, library, etc.

A few important information resources are:

California Department of Fish and Game - www.dfg.ca.gov

California Department of Fire Protection - www.fire.ca.gov/php/

Fresno County - www.co.fresno.ca.us

Sierra National Forest - www.fs.fed.us/r5/sierra/

United States Environmental Protection Agency - www.epa.gov

Sierra Resource Conservation District - www.sierrarcld.com

**USDA Natural Resources Conservation Service,
Fresno Service Center** - (559) 276-7494 ext. 3

Check out the library and local book sellers for the many great guide books on identifying and learning about wildlife, plants and mother Earth. A good overall general information book is: "Sierra Nevada Natural History" by Storer and Usinger.

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The mission of the Yosemite/Sequoia Resource Conservation and Development Council is to promote the quality and aesthetic values of our cultural, environmental, and recreational resources by improving the quality of life through sustainable, diverse economic development.

The Yosemite/Sequoia RC&D serves Mariposa, and eastern Madera, Fresno, and Tulare Counties. Sponsors include: the Boards Of Supervisors from Mariposa, Madera, Fresno, and Tulare counties; Coarsegold, Chowchilla-Redtop, Mariposa County, Sierra, and Tulare County Resource Conservation Districts; the Tule River Indian

Reservation; North Fork, Big Sandy, Cold Springs, and Picayune Rancherias; North Fork Community Development Council; Mariposa County Economic Development Corporation; Sierra Foothill Conservancy and the SAMS (Sierra-Nevada Access, Multiple-Use & Stewardship) Coalition. The Council also works with many other partners. For more information or to request more copies of "Welcome to the Foothills", visit www.ysrcandd.org or call (559) 877-8660.



The Fresno County Resource Advisory Committee (RAC) is a federally designated committee of local residents who assist in the approval of projects which benefit our local forest. The fifteen member RAC represents diverse interests from the community including outdoor recreation, commercial timber, grazing, environmental groups, American Indians, a local elected official and members of the public at large. The Committee's main goal is to use available funds to support projects that both foster environmental health and a sound economy. For more information contact the Forest Service at (559) 855-5355.



The Sierra Resource Conservation District (SRCD) was formed and ratified by Fresno County in May 1957. Federal Legislation authorized Resource Conservation Districts in 1937 under the Standards Act. California adopted a compatible state provision in 1938 as expressed in Division 9 of the Public Resources Code Sections 9001 et seq. These provisions have been amended through the years to reflect changing needs and conditions.

As of 1992, the primary purposes of a Resource Conservation District under Section 9001(a) is to secure "the adoption of conservation practices including but not limited to farm, range, open space, urban development, wildlife, recreation, watershed, water quality, and woodland; to save the basic resources, soil, water, and air of the state from unreasonable and economically preventable waste and destruction."

The RCD's are empowered under both federal and state legislation. Agencies at all levels of government have responsibilities to provide expertise and to otherwise assist and cooperate with the RCD on natural resource projects. This is strengthened by additional inter-agency Memorandums of Understanding. The RCD is to provide local input and leadership and foster interagency cooperation and coordination on natural resource projects on both public and private lands.

The mission and function of the SRCD is to take available technical, financial and educational resources, whatever their source, and focus or coordinate them at the local level to meet the present and future natural resource needs of the local land user.

To accomplish this, SRCD maintains working relationships with Federal, State and County agencies and Departments, non-profit organizations, educational institutions that have natural resource duties and responsibilities under law, and with public and private landowners.



Sierra Resource
Conservation District



San Joaquin Valley Resource
Conservation & Development Council

